Claims:

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1. An introducer tool for implanting a repair kit (9, 11) on a prepared bone site (1, 3, 5) from which damaged tissue has been removed, and around which a groove (7) into the bone has been formed, said kit comprising a bio-compatible pad (9) to fit on the prepared bone site, and an overlying cover sheet (11) to fit in the groove (7), and in which the tool comprises:

an introducer cylinder (44) having a hollow driving head (44a) at one end for introducing an outer portion (11a) of the cover sheet into the groove (7);

a plunger (43) relatively slidable within the cylinder (44) and having a delivery end (43a) engageable with the cover sheet so as to move a main portion (11b) of the cover sheet towards the bone site with the outer portion (11a) of the cover sheet trailing behind the main portion (11b); and

a pad-receiving recess defined between the delivery end (43a) of the plunger (43) and the inner wall of the cylinder when the cylinder and the plunger are relatively adjusted to a pad-implantation position, so that a pad (9) can be introduced into the recess so as to overlie the main portion (11b) of the cover sheet (11):

in which the internal arrangement of the cylinder (44) and the plunger (43) is such that relative withdrawal of the driving head (44a) of the cylinder (44), followed by relative advancing movement, allows the driving head 44a to engage the trailing portion (11a) of the cover sheet (11) and to introduce the trailing portion (11a) into the groove (7) while the pad (9) engages the bone site and thereby to anchor the pad in position.

- 2. An introducer tool according to claim 1, including a flange integrally (45), or removably (45a) at an entry end of the cylinder (44) against which the cover sheet 11 can be located, prior to insertion of the plunger (43) into the cylinder (44).
- 3. An introducer tool according to claim 1 or 2, including means (46, 46a) for limiting the movement of the plunger (43) within the cylinder (44), and thereby define the padreceiving recess between the end (43a) of the plunger and the surrounding wall of the cylinder (44).

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- 4. A introducer tool according to claim 3, when appendant to claim 2, in which the removable abutment comprises a retaining pin (46) receivable by a transverse hole (47) in the plunger (43), and engageable with said flange (45) in order to limit the movement of the plunger (43) within the cylinder (44).
- 5. An introducer tool according to any one of claims 1 to 4, including a pad-loading block (49) having a number of cells (50) each arranged to receive at least one pad (9), said block (49) being co-operable with the plunger (43) to allow the plunger to be loaded with at least one pad (9).
- 6. An introducer tool according to claim 5, in which the plunger (43) has a projecting pin (48) to facilitate removal of a pad (9) from the block (49), and to attach the pad (9) to the plunger.

7. A bone site preparation device (30) for removing damaged tissue from a bone site 1, 3 and for forming an annular groove (7) around the site, said device comprising: a reamer (34) for forming the groove (7);

a centralising device (31) housed within the reamer (34) and having a pointed end (33) for piercing the bone (3) and defining a centre of a circle delineating a defect site of the bone (3); and

means biassing the pointed end (33) axially outwardly of the reamer (34) to engage with the bone whereby a surgeon may operate the device (30) via one hand by simultaneously maintaining the centralising device (31) engaged with the bone while cutting the annular groove (7) with the reamer (34).

8. A device according to claim 7, in which the reamer (34) has cutting teeth at one end (36), and a debris channel (37) formed in said one end (36) to allow bone fragments formed by the teeth to escape while the annular groove (7) is being formed.

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- 9. A device according to claim 7 or 8, including a cylindrical cutter (38) for removing damaged tissue and which can inter-fit with the reamer (34) to be rotatable relative to the reamer.
- 10. A device according to any one of claims 7 to 9, in which the end (35) of the reamer (34) remote from the centralising device (31) is adapted to be coupled to a power tool.
  - 11. A device according to any one of claims 7 to 10, including a cylindrical guard (40) and a cutting tool (4), rotatable by the guard (40) in which the guard (40) is capable to being received by the groove (7) while the cutting tool (41) removes damaged tissue surrounded by the groove (7).
  - 12. A method of implanting a repair kit (9, 11) on a prepared bone site (1, 3, 5) from which damaged tissue has been removed, and around which a groove (7) into the bone has been formed, said kit comprising a bio-compatible pad (9) to fit on the prepared bone site, and an overlying cover sheet (11) to fit in the groove (7), and comprising the following steps:

introducing an outer portion (11a) of the cover sheet (11) into the groove (7) using an introducer cylinder (44) having a hollow driving head (44a) at one end which engages the cover sheet (11);

relatively sliding a plunger (43) within the introducer cylinder (44) so that a delivery end (43a) of the plunger (43) engages with the cover sheet and moves a main portion (11b) of the cover sheet towards the bone site with the outer portion (11a) of the cover sheet trailing behind the main portion (11b);

introducing a pad (9) into a pad-receiving recess defined between the delivery end (43a) of the plunger (43) and the inner wall of the cylinder (44) when the cylinder and the plunger are relatively adjusted to a pad-implantation position, wherein the pad (9) overlies the main portion (11b) of the cover sheet (11); and

introducing the trailing portion (11a) of the cover sheet (11) into the groove (7) by engagement of the driving head (44a) of the cylinder (44) with the trailing portion (11a) while the pad (9) engages the bone site and is anchored in position.

13. A method according to claim 12, in which relative withdrawal of the driving head (44a) of the cylinder (44) is followed by relative advancing movement, which allows the driving head (44a) to engage the trailing portion (11a) of the cover sheet (11) and to introduce the trailing portion (11a) into the groove (7) while the pad (9) engages the bone site and is anchored thereby.